

What is claimed is:

1. Calender for calendering a web of paper or board, the calender comprising

- a top roll (1) and a bottom roll (2), both of the rolls being of the variable-crown type,

- at least one intermediate roll (3) of an intermediate roll stack adapted between said top roll (1) and said bottom roll (2) in a disposition allowing the superimposed rolls (1, 2, 3) of the stack to be brought into a nip contact with each other during calendering, and

- bearing blocks (4) in which said rolls (1, 2, 3) are mounted, and

- mounts (5) to which the bearing blocks (4) of the intermediate roll (3) are connected and which are slidably connected to the guides (7) adapted to the calender frame (6),

characterized by actuator means (9, 19) adapted between the mounts (5) of said superimposed rolls (1, 2, 3) forming said nips and/or between the bearing blocks (4) of said rolls so as to accomplish the relief of nip loading imposed by the weight of said intermediate rolls (3) and the auxiliary means connected thereto.

2. Calender according to claim 1, characterized in that said actuator means is a spring (9).

3. Calender according to claim 1 or 2, c h a r a c -
~~t e r i z e d i n t h a t s a i d a c t u a t o r m e a n s i s a~~
 hydraulic cylinder (19).

5 4. Calender according to any one of foregoing claims
 1-3, c h a r a c t e r i z e d i n t h a t s a i d
 actuator means are adapted to function between the
 mounts (5) of said superimposed rolls (1, 2, 3)
 forming said nips.

10 5. Calender according to any one of foregoing claims
 1-4, c h a r a c t e r i z e d i n t h a t s a i d
 actuator means are adapted to function between the
 bearing blocks (4) of said superimposed rolls (1, 2,
 15 3) forming said nips.

20 6. Calender according to claim 3, c h a r a c t e r -
 i z e d i n t h a t s a i d m o u n t (5) includes the
 cylinder portion of said hydraulic cylinder (19)
 with the hydraulic channels thereof.

25 7. Calender according to claim 3 or 6, c h a r a c -
 t e r i z e d i n t h a t s a i d b e a r i n g b l o c k (4)
 includes the cylinder portion of said hydraulic
 cylinder (19) with the hydraulic channels thereof.

8. Method for calendering a web of paper or board, the
 method comprising the steps of

30 - passing the web to be calendered via nips
 formed by a variable-crown top roll (1) and a
 variable-crown bottom roll (2), as well as at
 least one intermediate roll (3) of an inter-
 mediate roll set placed between said rolls, said
 35 rolls (1, 2, 3) being mounted in a bearing
 blocks (4) and the bearing blocks (4) of the

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intermediate roll (3) being slidably connected to the calender frame (6),

c h a r a c t e r i z e d i n t h a t

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- the nip loading imposed by the weight of said intermediate rolls (3) and the auxiliary means connected thereto is relieved by actuator means (9, 19) adapted between the mounts (5) of said superimposed rolls (1, 2, 3) forming said nips and/or between the bearing blocks (4) of said rolls.

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9. Method according to claim 8, c h a r a c t e r -
i z e d i n t h a t s a i d a c t u a t o r m e a n s (9 , 1 9) s e r v e
t o a c c o m p l i s h a n a t l e a s t e s s e n t i a l l y c o m p l e t e
r e l i e f o f t h e n i p l o a d i n g i m p o s e d b y t h e w e i g h t o f
s a i d i n t e r m e d i a t e r o l l s (3) a n d a u x i l i a r y d e v i c e s
c o n n e c t e d t h e r e t o .

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7 add B⁷

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